



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,024	06/25/2003	Bradley F. Eid	11336/521 P03089US	5596

757 7590 12/13/2006

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

TRAN, CON P

ART UNIT PAPER NUMBER

2615

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,024

Applicant(s)

EID ET AL.

Examiner

Con P. Tran

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 6, line 19, element "mixer 150" should be - -mixer 160- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-4** are rejected under 35 U.S.C. 102(b) as being anticipated by Fosgate U.S. Patent 5,307,415.

Regarding **claim 1**, Fosgate teaches a multi-channel matrix decoder module (1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62), comprising:

an input mixer (input conditioning and matrix means 6, Figs. 1, 2) that produces a plurality of input signal pairs (L', R', -L', and -R'; Figs. 1, 2; col. 6, lines 56-61); and

a matrix decoder (variable matrixing means 8, Figs. 1, 2) coupled to the input mixer (input conditioning and matrix means 6, Figs. 1, 2) that produces a plurality of output signals (LF, RF, CF, LB, RB and CB, Figs. 1, 2) as a function (i.e., differing proportions, by output matrix 48) of the input signal pairs (L', R', -L', and -R', col. 8, lines 43-56).

Regarding **claim 2**, Fosgate teaches a method for decoding multi-channel audio signals (1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62), comprising:

creating a plurality of input signal pairs (L', R', -L', and -R'; Figs. 1, 2; col. 6, lines 56-61) as a function (by input matrix 44) of three or more input signals (L', R', L'', and R''; Fig. 2, col. 8, lines 31-38); and

creating a plurality of output signals (LF, RF, CF, LB, RB and CB, Figs. 1, 2) as a function (i.e., differing proportions, by output matrix 48) of the plurality of input signal pairs (L', R', -L', and -R', col. 8, lines 43-56).

Regarding **claim 3**, Fosgate teaches a surround processing system (including surround processor 1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62), comprising:

a multi-channel matrix decoder module (1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62) that produces a plurality of output signals (LF, RF, CF, LB, RB and CB, Figs. 1, 2; col. 8, lines 43-56); and

an adjustment module (power amplifier, not shown, col. 6, lines 51-55)
that produces a plurality of adjusted output signals (to speakers 24-34).

Regarding **claim 4**, Fosgate teaches a vehicular multi-channel sound processing system (including surround processor 1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62; automobile application, col. 21, lines 21-35), comprising:

a multi-channel matrix decoder module (1, see Figs. 1, 2, and respective portions of the specification; col. 1, lines 12-15, 58-62) that creates a plurality of output signals (LF, RF, CF, LB, RB and CB, Figs. 1, 2; col. 8, lines 43-56); and

a plurality of speakers (speakers 24-34) that receive the plurality of output signals (LF, RF, CF, LB, RB and CB, Figs. 1, 2; col. 8, lines 43-56).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Con P. Tran whose telephone number is (571) 272-7532. The examiner can normally be reached on M - F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Vivian C. Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2615

published applications may be obtained from either Private PAIR or Public PAIR.


Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

cpt CPJ
December 7, 2006


BRIAN TYRONE PENDLETON
PRIMARY EXAMINER